

CLAIMS

What is claimed is:

1. A form for constructing concrete pier blocks comprising:
four substantially planar side walls made from corrugated plastic having spaced, integral interconnecting ribs between two facing sheets of plastic;
each side wall having a long axis, a short axis, a first end, a second end, an interior surface an exterior surface, a top edge, and a bottom edge; and
the first end of each side wall being immediately adjacent to the second end of another of the side walls such that a corner is formed at each end of the side walls, thereby defining a form interior for the placement of concrete and an exterior.
2. The form of claim 1 further comprising: means for securing sections of reinforcing bars within the interior of the form.
3. The form of claim 1 further comprising: means for securing the form in a desired location at a construction site.
4. A form for constructing concrete pier blocks comprising:
four substantially planar side walls made from corrugated plastic having spaced, integral interconnecting ribs between two facing sheets of plastic;
each side wall having a long axis, a short axis, a first end, a second end, an interior surface an exterior surface, a top edge, and a bottom edge;

the first end of each side wall being immediately adjacent to the second end of another of the side walls such that a corner is formed at each end of the side walls, thereby defining a form interior for the placement of concrete and an exterior ; and
means for supporting a plurality of horizontal reinforcing bars within the form.

5. The form of claim 4 wherein the form comprises one piece of corrugated plastic having spaced, integral interconnecting ribs between two facing sheets of plastic;

the piece of corrugated plastic having a long axis, a short axis, and two ends;

the piece of corrugated plastic further having three seams at right angles to the long axis whereby the seams define the four side walls of the form; and

the ends of the piece of corrugated plastic are connected to each other.

6. The form of claim 5 wherein the ends of the piece of corrugated plastic are connected to each other by an adhesive substance.

7. The form of claim 5 wherein one end of the piece of corrugated plastic has a plurality of tab portions protruding therefrom and the other end of the piece of corrugated plastic has an equal number of slots communicating through the piece of corrugated plastic adjacent to the end of the piece of corrugated plastic that is opposite the end with the tab portions; and the ends of the piece of corrugated plastic are connected to each other by inserting the tab portions through the slots.

8. The form of claim 5 wherein one end of the piece of corrugated plastic has a first slot communicating from the top edge of the side wall to a point approximately midway between the top edge of the side wall and the bottom edge of the side wall, the slot being located adjacent to the end of the piece of corrugated plastic, the width of the slot being approximately equal to the thickness of the piece of corrugated plastic;

the other end of the piece of corrugated plastic has a second slot communicating from the bottom edge of the sidewall to a point approximately midway between the bottom edge of the side wall and the top edge of the side wall, the slot being located adjacent to the end of the piece of corrugated plastic, the width of the slot being approximately equal to the thickness of the piece of corrugated plastic; and

the ends of the piece of corrugated plastic are connected to each other by aligning the ends so that the second slot is directly above the first slot and pushing downward on the end of the piece of corrugated plastic having the second slot such that the bottom edge of the side wall having the second slot is aligned with the bottom edge of the side wall having the first slot.

9. The form of claim 5 wherein the spaced, integral interconnecting ribs between two facing sheets of plastic are oriented at a right angle to the long axis of the piece of corrugated plastic;

one end of the piece of corrugated plastic has a plurality of tab portions protruding therefrom and the other end of the piece of corrugated plastic has an equal number of notches in a shape complimentary to the tab portions, and located along the end of the piece of corrugated plastic that is opposite the end with the tab portions in positions that are complimentary to the tab portions; and

the ends of the piece of corrugated plastic are connected to each other by inserting the tab portions into the notches and inserting a stake into the space between the integral interconnecting ribs of the corrugated plastic at the end of a piece of corrugated plastic having the notches, through the space between the integral interconnecting ribs of the corrugated plastic of the tab portions, and into the substrate beneath the form.

10. The form of claim 4 wherein the form comprises a plurality of pieces of corrugated plastic having spaced, integral interconnecting ribs between two facing sheets of plastic; each piece of corrugated plastic having a long axis, a short axis, and two ends; and means for connecting the ends of each piece of corrugated plastic to the ends of other pieces of corrugated plastic.

11. The form of claim 10 wherein the means for connecting the ends of each piece of corrugated plastic to the ends of other pieces of corrugated plastic are a plurality of tab portions protruding from one end of each piece of corrugated plastic and an equal number of slots communicating through the piece of corrugated plastic adjacent to the end of the piece of corrugated plastic that is opposite the end with the tab portions; and whereby the ends of the pieces of corrugated plastic are connected to the ends of another piece of corrugated plastic by inserting the tab portions of one piece of corrugated plastic through the slots on another piece of corrugated plastic.

12. The form of claim 10 wherein one end of each piece of corrugated plastic has a first slot communicating from the top edge of the side wall to a point approximately midway between the

top edge of the side wall and the bottom edge of the side wall, the slot being located adjacent to the end of the piece of corrugated plastic, the width of the slot being approximately equal to the thickness of the piece of corrugated plastic;

the other end of the piece of corrugated plastic has a second slot communicating from the bottom edge of the sidewall to a point approximately midway between the bottom edge of the side wall and the top edge of the side wall, the slot being located adjacent to the end of the piece of corrugated plastic, the width of the slot being approximately equal to the thickness of the piece of corrugated plastic; and

the ends of the pieces of corrugated plastic are connected to each other by aligning the ends so that the second slot in one piece of corrugated plastic is directly above the first slot of another piece of corrugated plastic and pushing downward on the end of the piece of corrugated plastic having the second slot such that the bottom edge of the side wall of the piece of corrugated plastic having the second slot is aligned with the bottom edge of the side wall of the piece of corrugated plastic having the first slot.

13. The form of claim 10 wherein the form comprises two pieces of corrugated plastic.

14. The form of claim 10 wherein the form comprises four pieces of corrugated plastic.

15. the form of claim 4 further comprising flanges located at the bottom edge of the side walls.

16. The form of claim 15 wherein the flanges are integral to the side walls and are defined by a seam running parallel to the long axis of the side walls along the bottom edge of the side walls.

17. The form of claim 15 wherein the flanges are constructed from a separate piece of corrugated plastic than the side walls and the flanges are connected to the side walls along the bottom edge of the side walls.

18. The form of claim 4 wherein the means for securing reinforcing bars within the form is a corrugated plastic reinforcing bar holder having four substantially planar side walls, each with a plurality of slots for the placement of reinforcing bars, and spacers on each side wall to ensure proper spacing of the reinforcing bar holder from the side walls;

whereby the reinforcing bar holder is placed into the form interior and the reinforcing bars are placed into the holder.

19. The form of claim 4 wherein the means for securing reinforcing bars within the form are a plurality of holes evenly spaced along the long axis of the side walls.

20. The form of claim 4 further comprising means for securing the form in a desired location at a construction site.

21. The form of claim 20 wherein the means for securing the form in a desired location at a construction site are a plurality tabs that are scored into the form side walls, each tab being further scored to provide for an anchor stake insertion hole;

whereby the tabs can be pushed to the exterior of the form, the corrugated plastic material can be removed from the scored area on the tab to create the anchor stake insertion hole, and an anchor stake can be inserted into the anchor stake insertion hole for securing the form in a desired location.

22. A form for constructing concrete pier blocks comprising:

a single piece of corrugated plastic having spaced, integral interconnecting ribs between two facing sheets of plastic;

the piece of corrugated plastic further having a long axis, a short axis, a first end, a second end, an interior surface an exterior surface, a top edge, and a bottom edge;

the first end of the piece of corrugated plastic being connected to the second end of the corrugated plastic such that said form is cylindrical in shape and has an exterior and an interior; and

means for securing horizontal reinforcing bars within the interior of the form.

23. The form of claim 22 further comprising means for securing the form in a desired location on a construction site.

24. A form for constructing concrete pier blocks comprising:

four substantially planar side walls made from corrugated plastic having spaced, integral interconnecting ribs between two facing sheets of plastic;

each side wall having a first end, a second end, an interior surface an exterior surface, a top edge, and a bottom edge;

the first end of each side wall being immediately adjacent to the second end of another of the side walls such that a corner is formed at each end of the side walls, thereby defining a form interior for the placement of concrete and an exterior;

each of walls having a plurality of scored areas such that the scored areas form reinforcing bar tabs and each of the reinforcing bar tabs being further scored for a reinforcing bar insertion hole;

whereby the reinforcing bar tabs can be pushed into the interior of the form and the corrugated plastic can be removed from the scored area on the reinforcing bar tabs thereby forming a reinforcing bar insertion hole on each reinforcing bar tab and the ends of sections of reinforcing bars can be placed in the reinforcing bar insertion holes such that the sections of reinforcing bars extend across the interior of the form at generally right angles to two of the side walls and generally parallel to the other two side walls.

25. The form of claim 24 wherein at least two of the side walls further have an additional scored area such that the scored area forms a anchor stake tab and the anchor stake tab is further scored for a anchor stake insertion hole;

whereby the anchor stake tabs can be pushed to the exterior of the form and the corrugated plastic can be removed from the scored area on the anchor stake tabs thereby forming a anchor stake insertion hole on each anchor stake tab and anchor stake can be placed in the anchor stake insertion holes and used to secure the form in a desired location at a construction site.

26. The form of claim 24 wherein the form comprises one piece of corrugated plastic having

spaced, integral interconnecting ribs between two facing sheets of plastic;
the piece of corrugated plastic having a long axis, a short axis, and two ends;
the piece of corrugated plastic further having three seams at right angles to the long axis
whereby the seams define the four side walls of the form; and
the ends of the piece of corrugated plastic are connected to each other by an adhesive;

27. The form of claim 24 wherein sections of reinforcing bar can be placed in the reinforcing bar insertion holes on the reinforcing bar tabs before form is taken to a construction site; and
the form can be folded flat and stacked with other forms while the sections reinforcing bar are in the form.

28. The form of claim 24 wherein the four side walls define a generally square interior and when sections of reinforcing bar are placed in the reinforcing bar insertion holes on the reinforcing bar tabs and concrete is poured into the form, the hydrostatic pressure exerted on the side walls by the concrete causes uniform deformation in the side walls such that the generally square form assumes a circular shape, while the reinforcing bars remain in their desired location; and the resulting pier block is circular in shape.

29. A method for constructing a concrete pier block comprising the steps of:
(a) selecting a location for constructing the pier block;
(b) preparing the location for construction of the pier block;
(c) selecting a form for construction of the pier block that comprises four substantially planar side walls made from corrugated plastic having spaced, integral

interconnecting ribs between two facing sheets of plastic;

each side wall having a long axis, a short axis, a first end, a second end, an

interior surface an exterior surface, a top edge, and a bottom edge;

the first end of each side wall being immediately adjacent to the second end of another of the side walls such that a corner is formed at each end of the side walls, thereby defining a form interior for the placement of concrete and an exterior;

(d) placing the form in the selected location;

(e) pouring concrete into the form; and

(f) allowing the concrete to harden.

30. The method of claim 29 wherein the form that is placed in the selected location further comprises means for securing sections of reinforcing bar within the form and the method has additional step of placing sections of reinforcing bars within the form before the step of pouring concrete into the form.

31. The method of claim 29 wherein the form that is placed in the selected location further comprises means for securing the form in the selected location and the method has the additional step of securing the form in the selected location after the step of placing the form in the selected location and before the step of pouring concrete into the form.